TOSTT-86701

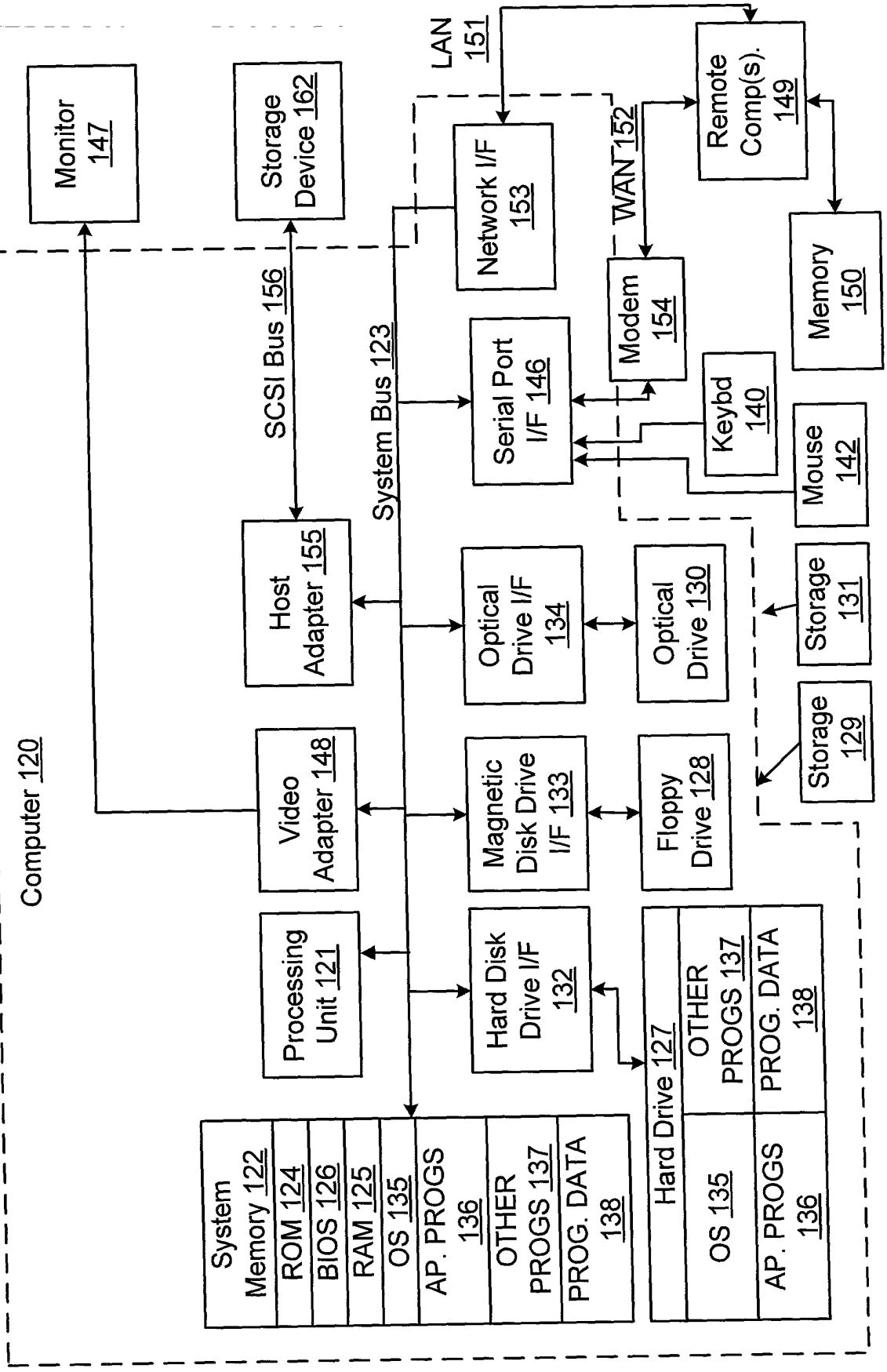


Fig. 1

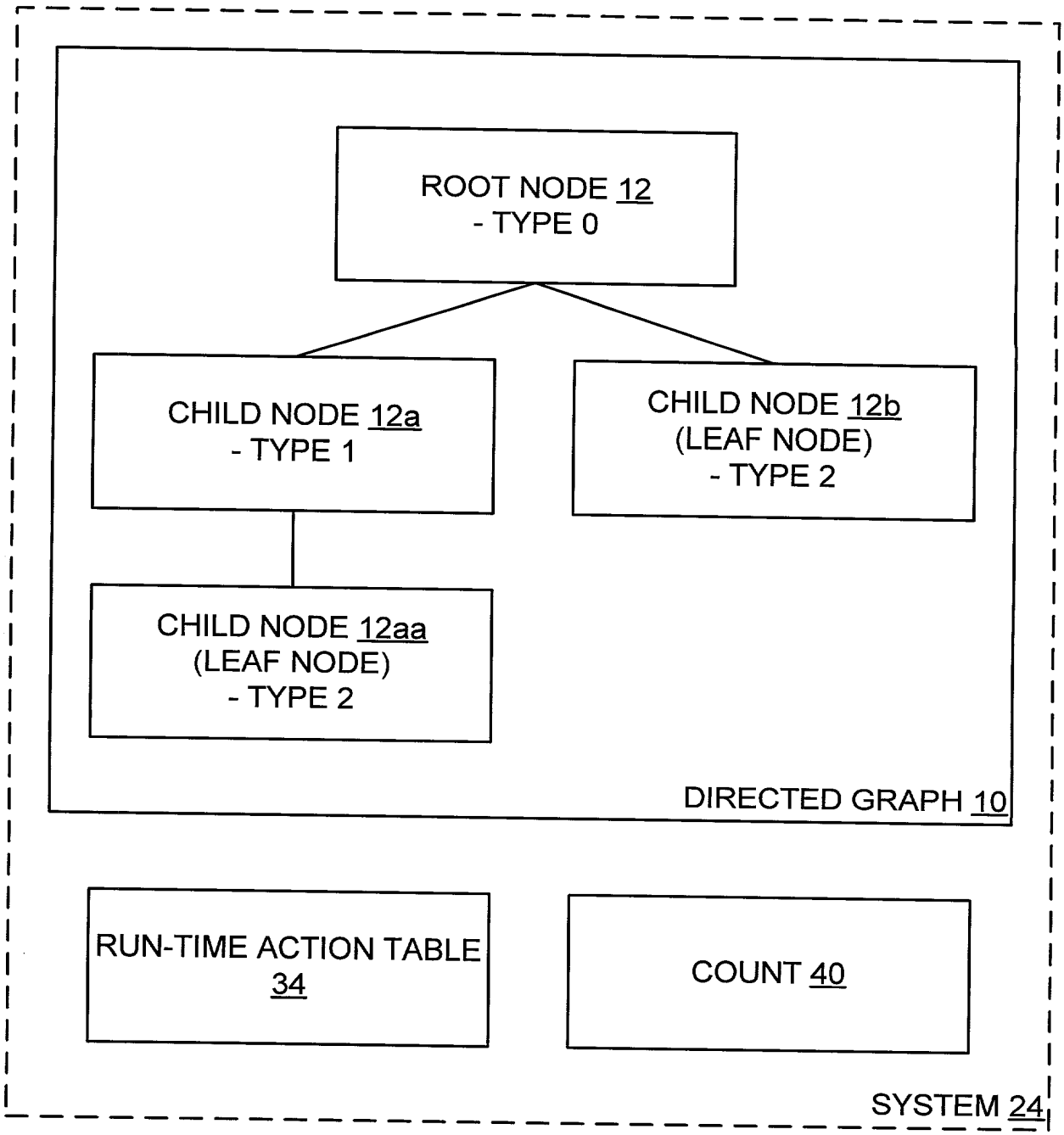

ROOT NODE 12
- TYPE 0
CHILD NODE 12a
- TYPE 1
CHILD NODE 12b
(LEAF NODE)
- TYPE 2
CHILD NODE 12aa
(LEAF NODE)
- TYPE 2
DIRECTED GRAPH 10
RUN-TIME ACTION TABLE
34
COUNT 40
SYSTEM 24

Fig. 2

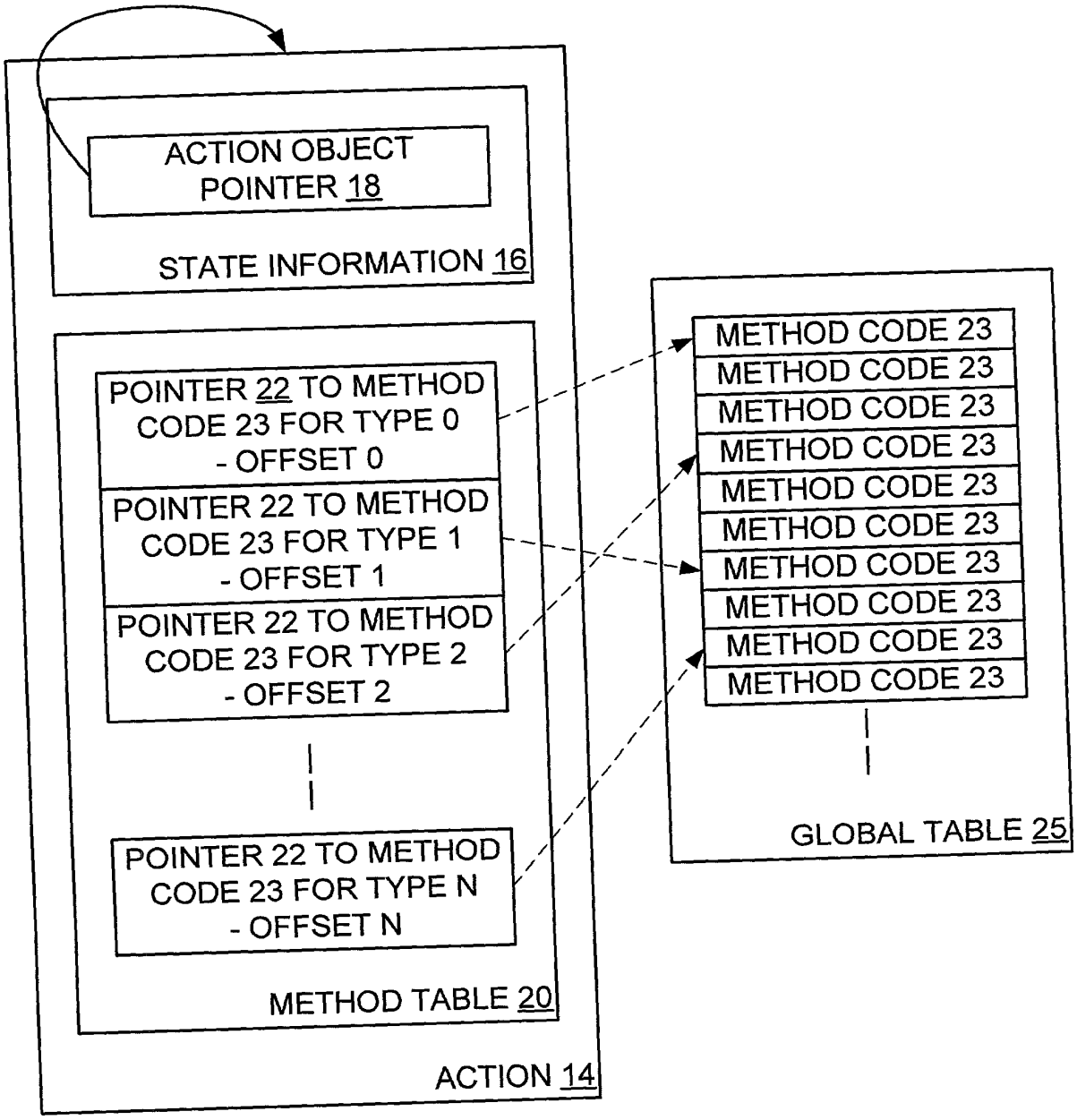

ACTION OBJECT POINTER 18
STATE INFORMATION 16
POINTER 22 TO METHOD CODE 23 FOR TYPE 0 - OFFSET 0
POINTER 22 TO METHOD CODE 23 FOR TYPE 1 - OFFSET 1
POINTER 22 TO METHOD CODE 23 FOR TYPE 2 - OFFSET 2
POINTER 22 TO METHOD CODE 23 FOR TYPE N - OFFSET N
METHOD TABLE 20
ACTION 14
METHOD CODE 23
METHOD CODE 23
METHOD CODE 23
METHOD CODE 23
METHOD CODE 23
METHOD CODE 23
METHOD CODE 23
METHOD CODE 23
METHOD CODE 23
GLOBAL TABLE 25

Fig. 3

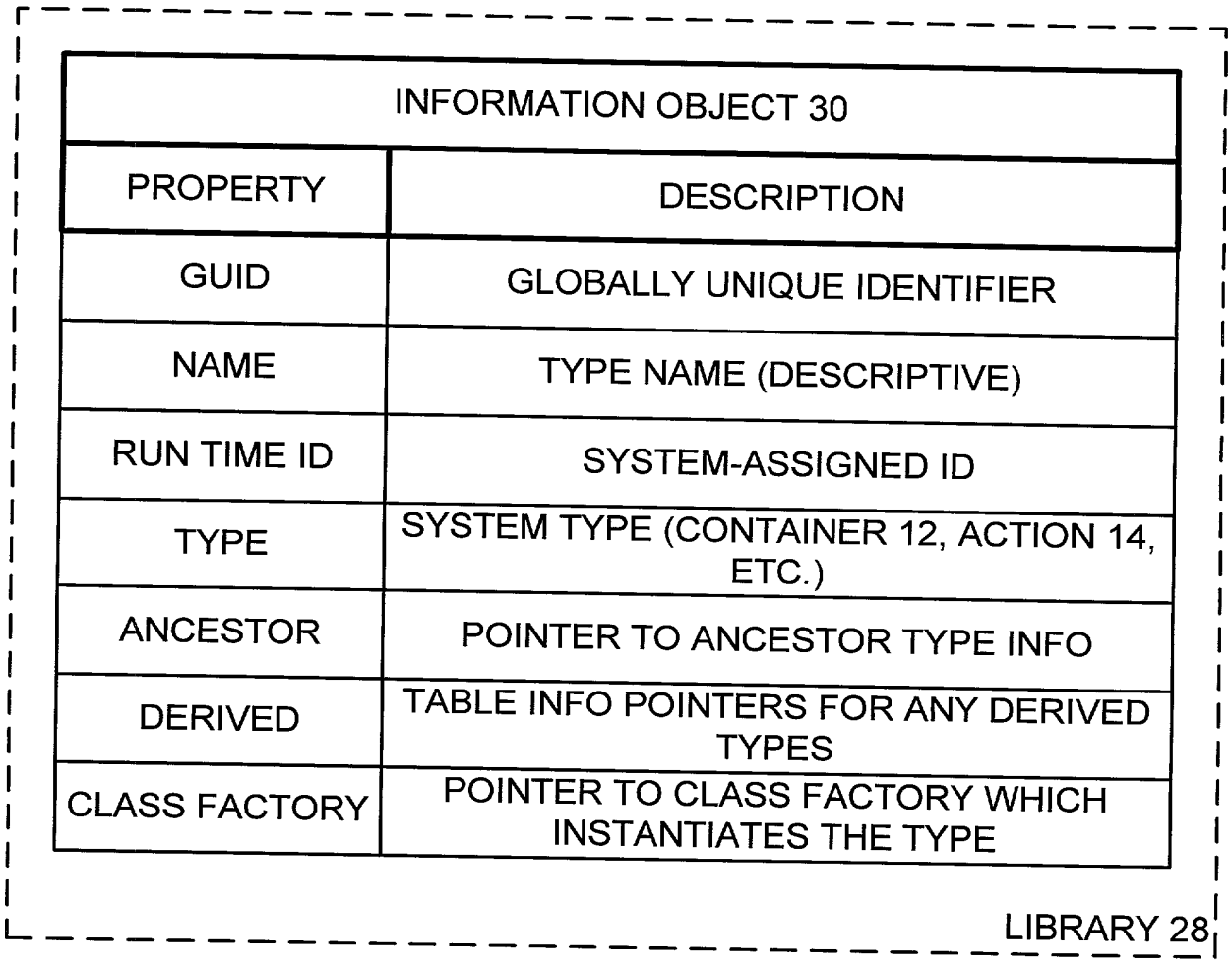

INFORMATION OBJECT 30
PROPERTY
DESCRIPTION
GUID
GLOBALLY UNIQUE IDENTIFIER
NAME
TYPE NAME (DESCRIPTIVE)
RUN TIME ID
SYSTEM-ASSIGNED ID
TYPE
SYSTEM TYPE (CONTAINER 12, ACTION 14, ETC.)
ANCESTOR
POINTER TO ANCESTOR TYPE INFO
DERIVED
TABLE INFO POINTERS FOR ANY DERIVED TYPES
CLASS FACTORY
POINTER TO CLASS FACTORY WHICH INSTANTIATES THE TYPE
LIBRARY 28

Fig. 4

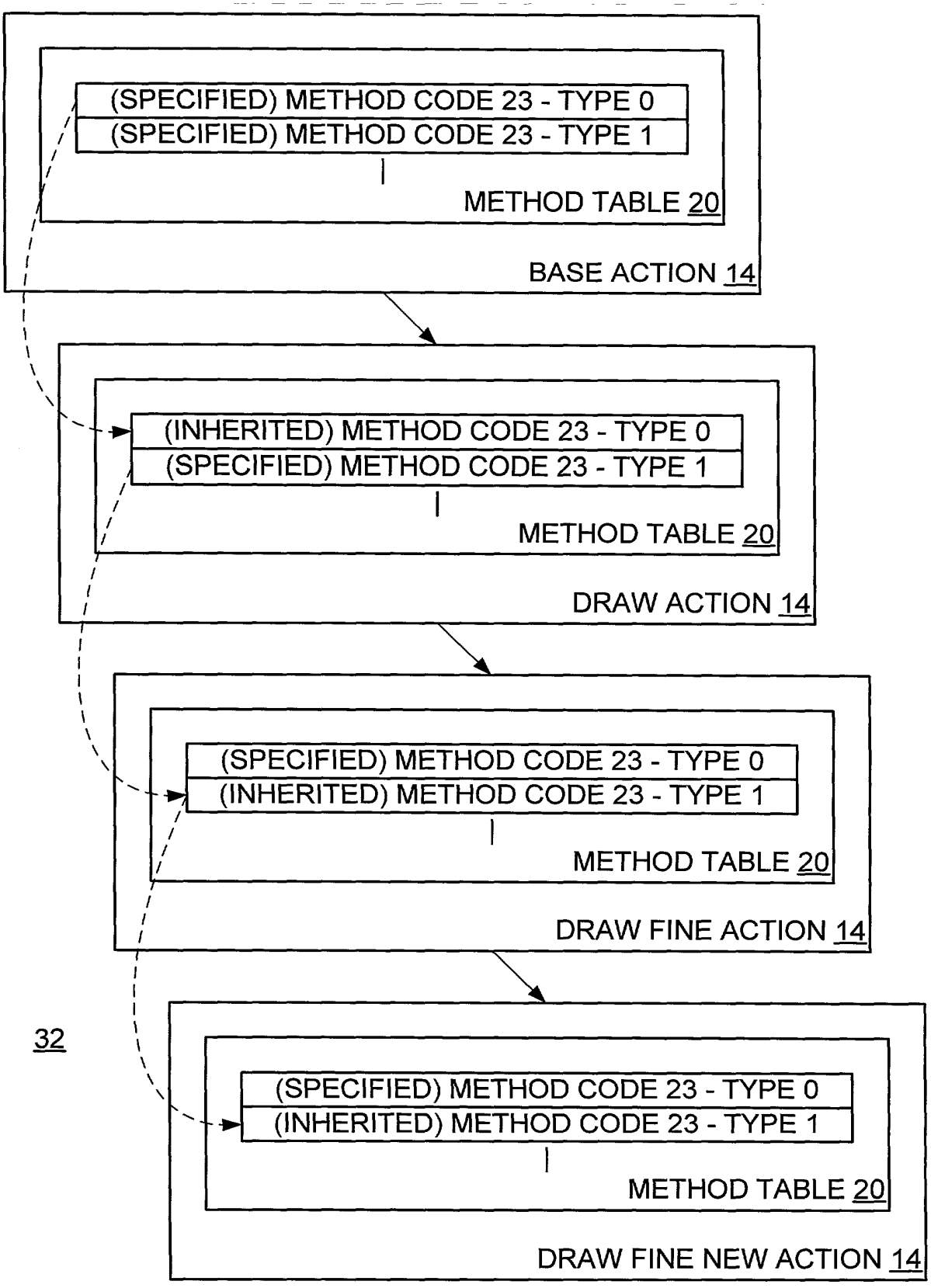
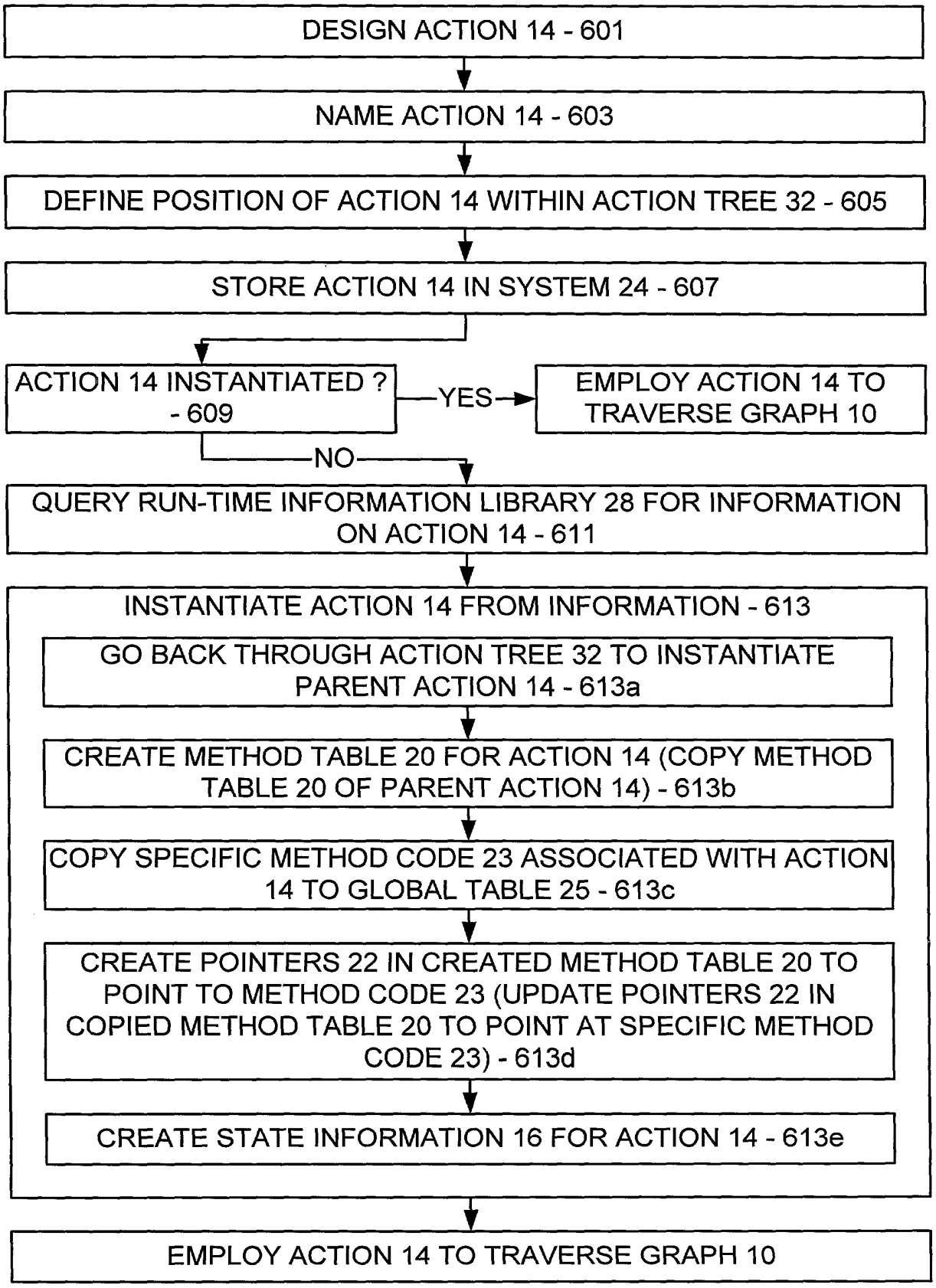

(SPECIFIED) METHOD CODE 23 - TYPE 0
(SPECIFIED) METHOD CODE 23 - TYPE 1
METHOD TABLE 20
BASE ACTION 14
(INHERITED) METHOD CODE 23 - TYPE 0
(SPECIFIED) METHOD CODE 23 - TYPE 1
METHOD TABLE 20
DRAW ACTION 14
(SPECIFIED) METHOD CODE 23 - TYPE 0
(INHERITED) METHOD CODE 23 - TYPE 1
METHOD TABLE 20
DRAW FINE ACTION 14
32
(SPECIFIED) METHOD CODE 23 - TYPE 0
(INHERITED) METHOD CODE 23 - TYPE 1
METHOD TABLE 20
DRAW FINE NEW ACTION 14

Fig. 5



1005974.1 3059.4009

Fig. 6

Attorney Docket No. 144221.2

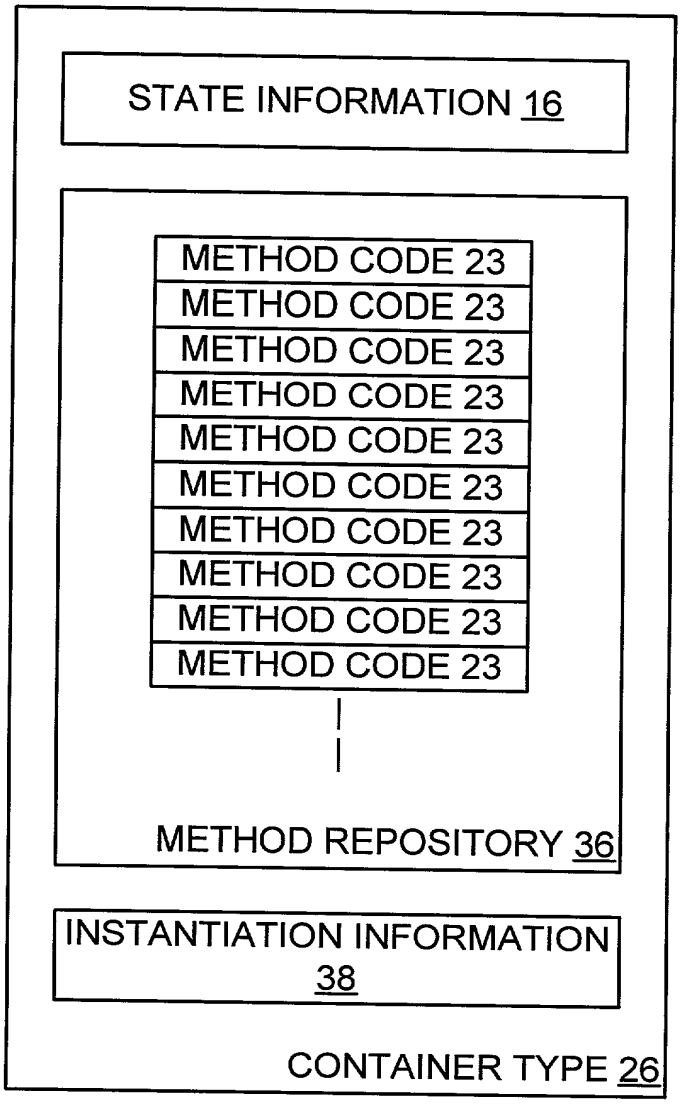


Fig. 7

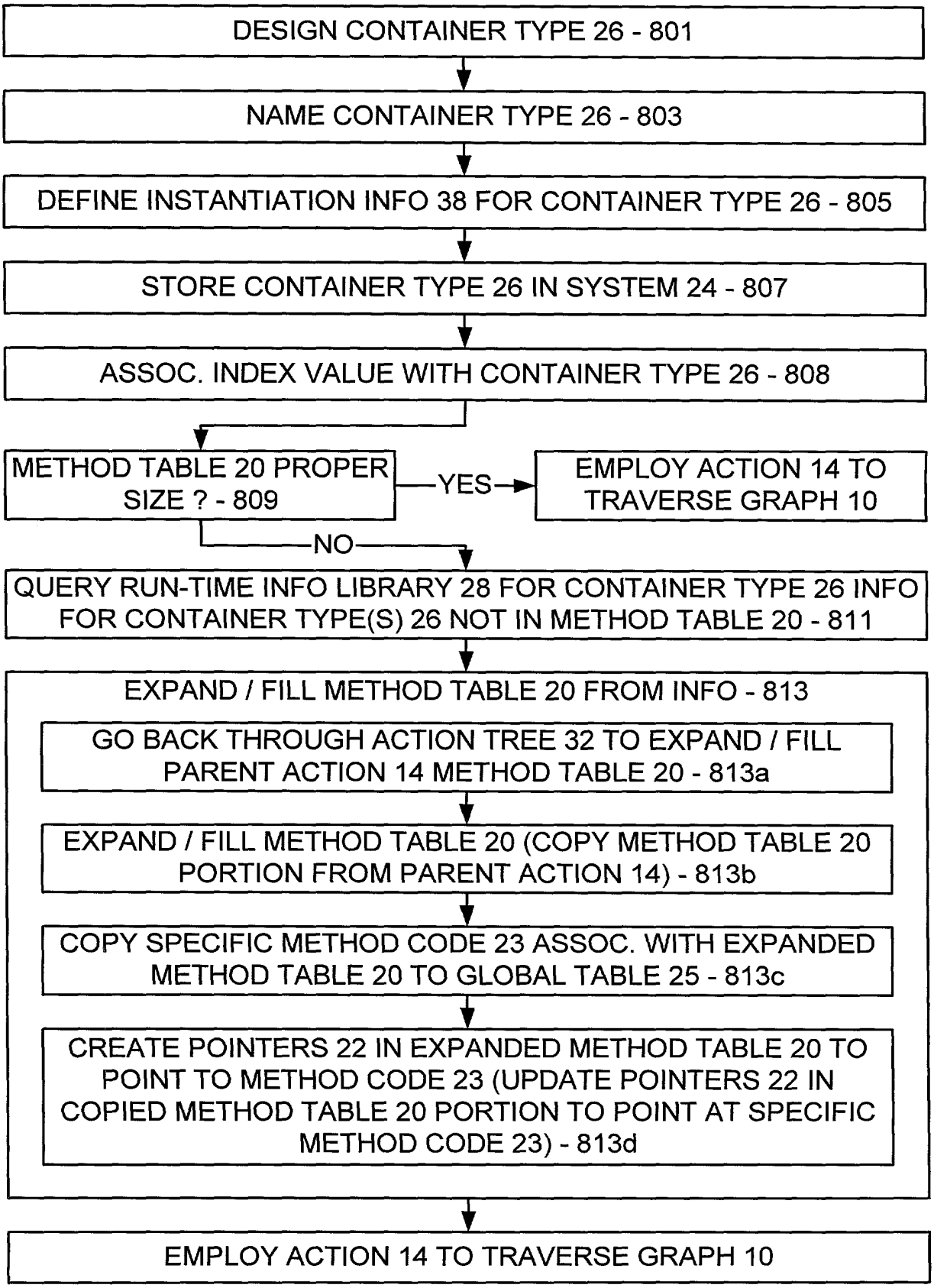

DESIGN CONTAINER TYPE 26 - 801
NAME CONTAINER TYPE 26 - 803
DEFINE INSTANTIATION INFO 38 FOR CONTAINER TYPE 26 - 805
STORE CONTAINER TYPE 26 IN SYSTEM 24 - 807
ASSOC. INDEX VALUE WITH CONTAINER TYPE 26 - 808
METHOD TABLE 20 PROPER SIZE ? - 809
YES
EMPLOY ACTION 14 TO TRAVERSE GRAPH 10
NO
QUERY RUN-TIME INFO LIBRARY 28 FOR CONTAINER TYPE 26 INFO FOR CONTAINER TYPE(S) 26 NOT IN METHOD TABLE 20 - 811
EXPAND / FILL METHOD TABLE 20 FROM INFO - 813
GO BACK THROUGH ACTION TREE 32 TO EXPAND / FILL PARENT ACTION 14 METHOD TABLE 20 - 813a
EXPAND / FILL METHOD TABLE 20 (COPY METHOD TABLE 20 PORTION FROM PARENT ACTION 14) - 813b
COPY SPECIFIC METHOD CODE 23 ASSOC. WITH EXPANDED METHOD TABLE 20 TO GLOBAL TABLE 25 - 813c
CREATE POINTERS 22 IN EXPANDED METHOD TABLE 20 TO POINT TO METHOD CODE 23 (UPDATE POINTERS 22 IN COPIED METHOD TABLE 20 PORTION TO POINT AT SPECIFIC METHOD CODE 23) - 813d
EMPLOY ACTION 14 TO TRAVERSE GRAPH 10

Fig. 8

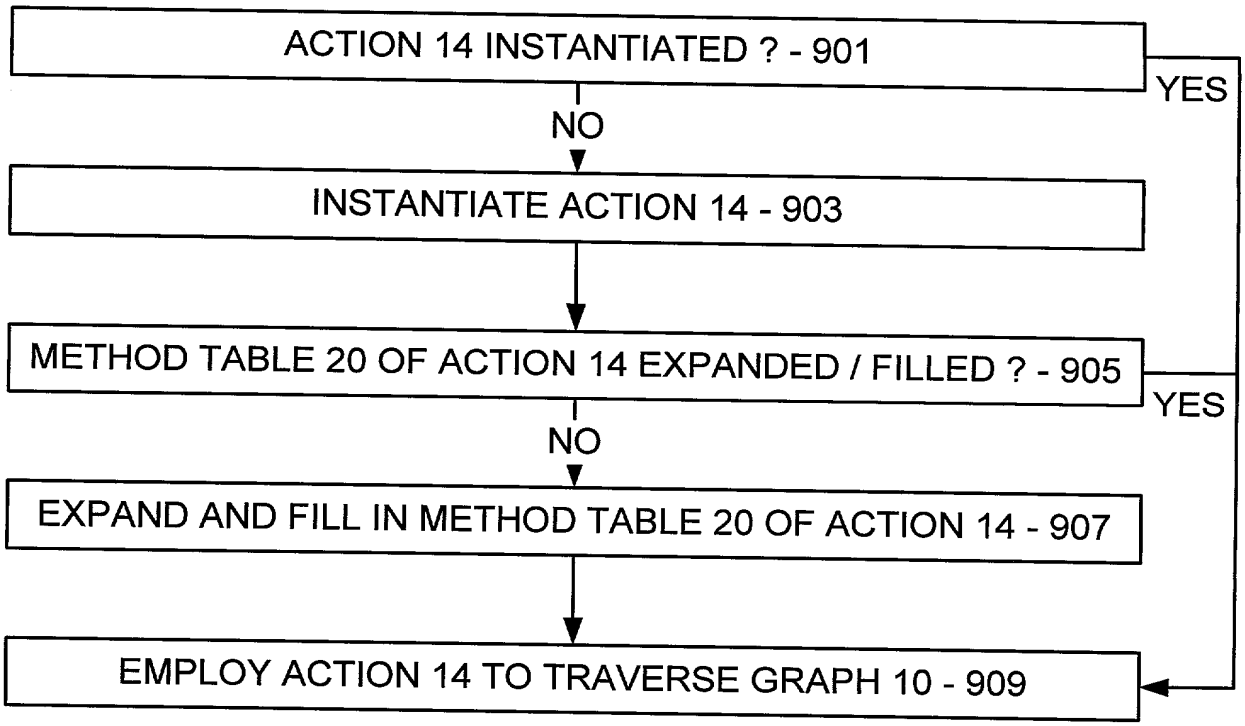

ACTION 14 INSTANTIATED ? - 901
YES
NO
INSTANTIATE ACTION 14 - 903
METHOD TABLE 20 OF ACTION 14 EXPANDED / FILLED ? - 905
YES
NO
EXPAND AND FILL IN METHOD TABLE 20 OF ACTION 14 - 907
EMPLOY ACTION 14 TO TRAVERSE GRAPH 10 - 909

Fig. 9